

Listing of the Claims:

1. (currently amended) A method of transmitting a signal, comprising:
generating a sequence of pseudorandom noise chips according to a pseudorandom noise code to produce a transmit signal at a base power level;
amplifying the transmit signal during time intervals to produce higher power pulses that are separated in time, wherein time intervals between a sequence of a group of the chips to a higher power level than chips not in the group so that successive higher power pulses ones of said groups of chips are separated by a time interval that is related are determined based on to a cryptographic sequence; and wherein the durations of the time intervals between successive groups represents synchronization information for said transmit signal; and
transmitting the transmit signal.

2-12. (canceled)

13. (currently amended) A transmitter suitable for transmitting a staggered pulse signal, comprising:
a code generator configured to generate a plurality of pulses according to a code to produce a transmit signal;
a cryptographic unit configured to generate a cryptographic sequence based on a cryptographic key; and
an amplifier connected to the code generator and the cryptographic unit the pulses, wherein the amplifier amplifies the transmit signal to a higher level during short bursts of time that are separated in time, wherein time intervals between successive short bursts are determined based on a group of a sequence of pulses to a higher power level than pulses not in said group, so that successive ones of said groups of pulses are separated by a time interval that is related to said cryptographic sequence; and wherein the durations of the time intervals between said successive groups represents synchronization information for the transmit signal.

14. (original) The transmitter of claim 13, wherein the code is a pseudorandom noise (PN) code.

15. (canceled)

16. (currently amended) A transmitter suitable for transmitting a staggered pulse signal, comprising:

code generator means for generating a plurality of pulses according to a code to produce a transmit signal;

means for generating a cryptographic sequence based on a cryptographic key; and

means for amplifying connected to said code generator means and said means for generating a first one of the pulses of the code to a first level and amplifying a second one of pulses of the code to a second level based on the cryptographic sequence, wherein the means for amplifying amplifies the transmit signal to a higher level during short bursts of time that are separated in time, wherein time intervals between successive short bursts are determined based on responds to the cryptographic sequence to amplify a group of a sequence of the pulses to a higher voltage level than pulses not in said groups, so that successive ones of said groups of pulses are separated by a time interval that is related to said cryptographic sequence, and wherein the durations of the time intervals between said successive groups represents synchronization information for said signal.

17. (original) The transmitter of claim 16, wherein the code is a pseudorandom noise (PN) code.

18. (canceled)

19. (currently amended) A receiver for receiving a staggered pulse signal having high-power pulses ~~of a code~~ separated by time intervals according to a cryptographic algorithm, the receiver comprising:

a cryptographic unit configured to generate a cryptographic sequence corresponding to the cryptographic algorithm; and

a code detection unit connected to the cryptographic unit and configured to detect a code phase of the high-power pulses in the received staggered pulse signal that comprises a group of a sequence of pulses at a higher power than pulses not in said group such that successive ones of said groups of pulses are separated by a to determine time interval intervals between bursts of the high-power pulses interval that is related to said cryptographic sequence, wherein the code detection unit decodes the time intervals between said successive groups of higher bursts of the high-power pulses to and thereby acquire synchronization to the staggered pulse signal.

20. (original) The receiver of claim 19, wherein the code detection unit comprises:

a correlator configured to correlate the received signal with a local code and to output a correlation signal; and

a decoder unit configured to decode the correlated signal based on the cryptographic sequence generated by the cryptographic unit.

21. (currently amended) The receiver of claim 20, wherein the decoder unit comprises a matched filter configured to detect a sequence of time intervals between the high power pulses of the received staggered pulse signal corresponding to the cryptographic sequence to acquire synchronization to the staggered pulse signal.

22. (original) The receiver of claim 21, wherein the cryptographic unit comprises a cryptographic processing unit and a cryptographic storage unit having stored therein cryptographic keys, wherein the cryptographic processing unit generates the cryptographic sequence based on a key stored in the cryptographic storage unit.

23. (currently amended) The receiver of claim 19, wherein the decoder unit uses a pseudorandom noise (PN) code to decode the correlated staggered pulse signal.

24. (currently amended) A receiver for receiving a staggered pulse signal having high-power pulses ~~of a code~~ separated by time intervals according to a cryptographic algorithm, the receiver comprising:

means for generating a cryptographic sequence corresponding to the cryptographic algorithm; and

~~code detection means for detecting a code phase of the received staggered pulse signal that comprises a group of a sequence of pulses at a higher the high-power pulses to determine time intervals between bursts of the high-power pulses than pulses not in said group such that successive ones of said groups of pulses are separated by a time interval that is related to said cryptographic sequence, wherein the code detection means decodes the time intervals between said successive bursts of the high- groups of higher power pulses and thereby to acquire synchronization to the staggered pulse signal.~~

25. (original) The receiver of claim 24, wherein said code detection means comprises:

means for correlating the received signal with a local code and outputting a correlation signal; and

decoder means for decoding the correlated signal based on the generated cryptographic sequence.

26. (currently amended) The receiver of claim 25, wherein said decoder means comprises filter means for detecting ~~a sequence of~~ time intervals between the high power pulses of the ~~received staggered pulse signal corresponding to the cryptographic sequence.~~

27. (currently amended) The receiver of claim 24, wherein the code detection means uses a pseudorandom noise (PN) code to decode the ~~correlated staggered pulse signal.~~

28. (currently amended) A method of transmitting a signal, comprising:

generating a sequence of pseudorandom noise chips according to a pseudorandom noise code to produce a transmit signal at a base power level;

increasing above the base power a power level of the transmit signal for short bursts of time that are separated by time intervals determined based on a cryptographic sequence, and wherein the time intervals represents synchronization information for the transmit signal a sequence of a group of the chips; and

separating said groups from each other by variable duration time intervals that is related to a cryptographic sequence and which represents synchronization information for said signal;

transmitting the transmit signal.

29. (currently amended) A method for receiving a staggered pulse signal comprising short bursts of higher power, wherein the short bursts are separated by time intervals according to a cryptographic algorithm, comprising:

receiving a sequence of pseudorandom noise chips comprising a first group of chips at an increased power level relative to a base power level interspersed with a second group of chips at the base power level, wherein time intervals between successive ones of said first groups of chips is related to a cryptographic sequence and represents synchronization information for the signal;

detecting the short bursts only the first group chips;

determining durations of time intervals between successive short bursts ones of the first groups of chips; and

acquiring synchronization to the staggered pulse signal based on said durations of said time intervals.